

Proto-professionalism: Opportunities for healthcare student learning and service to homeless people

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Abstract

The concepts of professionalism, including ethical practice, reflection, self-awareness, respect, teamwork and social responsibility, are present in the healthcare curriculum but rarely learned in combination. The concepts can be combined when students receive practical experiences on the challenges of delivering health and social care to populations experiencing poverty and disadvantage. We report on work with homeless people in our local communities designed to align social accountability responsibilities with healthcare curricula through a student volunteering project; initially established in a medical school. Using an ethical approach we developed this learning through a staff-student-community partnership. The outcome was learning consisting of theoretical teaching, practice learning and the potential to volunteer. We report on the development phases over several years (2013-2017) to address the following research question: Does participation in Leicester Initiative Good Health Team (LIGHT) advance students' perceived readiness for practice? The pedagogical evaluation used a sequential mixed methods approach. One hundred and ninety-five student participants completed pre- and post-questionnaires. Of these, 75% completed reflective assignments and many went on to volunteer. Twenty of those who volunteered participated in one-to-one interviews. Scored data from the pre- and post-questionnaires were analysed statistically, and reflective assignments were analysed using content analysis. The interview data were analysed using thematic analysis. The learning was positively experienced and students reported changed attitudes and understandings of homelessness. Practice-placements and volunteering further enhanced these insights and student's perceptions of readiness for clinical practice. This can be described as proto-professionalism. The student-staff-community partnership offers an ethical platform on which to build sustainable local outreach projects. The students gained a deeper appreciation of social injustice for homeless people.

Keywords: *homelessness; mixed-methods; practice-learning; proto-professionalism; stereotypes*

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Introduction

There is an expectation that universities, in the United Kingdom (UK) and particularly in North America who train health and social care professionals, are socially aware and outward facing, with a recent emphasis for medical school involvement (Fleet et al., 2008; Boelen et al., 2016; Ellaway et al., 2018). Inequity and disadvantage are features of society that all caring professional students must consider when preparing for practice. Many students within higher education have little insight into poverty and disadvantage, and an understanding of social injustice is needed for effective communication, based on genuine empathy (Gordon, 2019). In 2008, a global group of medical schools formed the Training Self Equity Network (THEnet) with a mission to improve equity and health outcomes with a focus on communities that are underserved (THEnet, n.d.; Boelen et al., 2019); this was followed by wider aspirations, for instance, for graduates to become ‘change agents’ for health equity (Larkins et al., 2013).

Service learning is perceived to offer a learning context which promotes critical reflection on civic responsibility and reciprocity (Sigmon, 1994; Robinson & Barnett, 1996; Schutte et al., 2015). The phrase ‘service learning’ emerged in the 1960s from aspirations to connect Higher Education Institutions (HEIs) to ‘the social and environmental challenges beyond the campus’ (Boyer, 1990, p.22). Sigmon (1994) described service learning as “serving equally the needs of the learners and the recipients, the underserved communities”. Successful service learning projects involving health and social care students, exist with very young children (Falter et al., 2011), ethnic minorities (Sheu et al., 2011), abuse victims (Averill et al., 2007), older people (Laks et al., 2016), and homeless people and populations experiencing poverty and disadvantage (Arndell et al., 2014). Service learning or volunteering offers students a possible journey to gain the competence expected of a professional; the state of ‘proto-professionalism’ (Hilton & Slotnick, 2005). Hilton and Slotnick set out six domains of proto-professionalism: ethical practice, reflection and self-awareness, responsibility for actions, respect for patients, teamwork and social responsibility. An important aspect of developing professionalism centres on ‘Phronesis’, a concept taken from Aristotle (Tsoukas & Cummings, 1997), meaning prudence or practical wisdom. This means understanding, absorbing and managing the situations in front of you, ‘the reality at hand’ (Hilton & Slotnick, 2005, p. 61). Outcomes from service learning, often with marginalized groups in North America, describe an experiential pathway to prepare students for professional practice (Arndell et al., 2014).

Table 1:

Aspire Criteria

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|---|
| <p>Criteria for Excellent award in Medical Education: ASPIRE-to excellence programme
http://www.amee.org/amee-initiatives</p> <ul style="list-style-type: none">• Student engagement with the management of the medical school, including matters of policy and the mission and vision of the school. (<i>Student engagement with the structures and processes</i>)• Student engagement in the provision of the medical school’s education programme. (<i>Student engagement with the delivery of teaching and assessment</i>)• Student engagement in the academic community. (<i>Student’s engagement in the school’s research programme and participation in meetings</i>)• Student engagement in the local community and the service delivery. |
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The student voice has been a strong driver of these successful volunteering models. Student involvement has recently become a priority in HEIs and within the UK, the Higher Education Academies push for student engagement in educational design (Healey et al., 2014). The earliest criteria for the ASPIRE-to-Excellence awards in medical education (International Association of Medical Education Awards-ASPIRE) include not only engaging the student voice, but also outward facing social responsibilities (Table 1) (Harden & Roberts, 2015). There is no doubt that students experience the curriculum in action

and can offer new insights as to what works and more importantly, what is missing ([Coles & Grant, 1985](#)). Such insights are reflected in numerous studies of student engagement in community projects working with marginalised groups ([Dungani & McGuire, 2011](#); [Anderson & Lennox, 2009](#); [Campbell et al., 2013](#)).

In pursuit of meaningful experiential learning to build proto-professional student confidence, we explored working with our local homeless populations. The North America models, often using open free clinics ([Dungania & McGuire, 2011](#); [Campbell et al., 2013](#); [Nakamura et al., 2014](#); [Schutte et al., 2015](#)) are not easily replicated in Europe where healthcare systems provide universal access to free healthcare. Despite this, in the UK, poverty and disadvantage are growing ([Hood & Waters, 2017](#)). In this context, we sought to set up an ethical and sustainable UK model of service outreach, working in partnership with students and our local community. Our focus was to support the health of our local homeless people through volunteering, by students trained through curricular or extra-curricular learning.

Background

We started our work from within medical education because medicine offers free curriculum space for exploration (student selected components) but have progressed to involve a range of health and social care schools. We initially consulted staff and students in a Canadian outreach model - SWITCH (Student Wellness Initiative Towards Community Health) ([Holmqvist et al., 2012](#)) to understand how core curriculum learning led to volunteering outreach projects. At this stage, we brought together a wide range of statutory and non-statutory service providers to inform our thinking. We then tested our early aspirations for service-learning using student-led research which asked homeless people whether they would accept health promotion from healthcare student volunteers ([Goodier et al., 2015](#)). This led to the launch of our project, Leicester Initiative Good Health Team (LIGHT). Our external stakeholders became partners in the LIGHT charity and with the HEI, ensured an ongoing dialogue to support the project.

Volunteer training was initially delivered to third, fourth and fifth year medical students in Student Selected Components (SSC). The course comprised theoretical and placement learning. Theoretical learning included legal, biopsychosocial and service provision for homeless people. Skill development included effective communication, dealing with conflict, first aid, and strategies for health promotion, as outlined in [Table 2](#). The andragogic approach applied a theoretical stance and used the Kolb learning cycle for theory, followed by placement experiences with critical analysis and reflection ([Kolb, 1984](#)).

This learning content was seen as preparation for student volunteers and was designed collaboratively with input from staff, students and local homeless agencies. Following successful medical students' evaluations, some learning places were offered to students on other courses, initially mainly pharmacy and nursing students. At this stage, all learning and volunteering became interprofessional. At the end of the course, all students (medical and non-medical) undertook an OSCE (Objective Structured Clinical Evaluation) in which they interacted with trained actors simulating homeless people with a range of health conditions. An extracurricular version of this course was later introduced and opened to students from a wide range of disciplines. In this way, the learning and volunteering was further enriched as interprofessional groups of students shared their knowledge and skills. Ethical considerations were central to the training and volunteering arrangements, especially for student and community protection, for team-based responses to address inequity, and a 'do with' rather than a 'do to' approach. It remained our ambition for students to go on and volunteer post-training, with students often uncertain about their next steps. Successful students who subsequently volunteered developed and ran health promotion sessions at a local hostel or offered a lunchtime drop in health-desk at another charity.

As we wanted to understand the impact of learning and volunteering, we studied students who undertook just the training elements and those who went on to volunteer. The aim of this study was to understand whether this curriculum content, theory and practice, furthered students' professional readiness for practice. We asked whether participating students felt that involvement in LIGHT had progressed their readiness for practice (proto-professionalism), and report on our findings in this article.

Table 2:

Teaching Content: Partnership design students-staff-community

Teaching Content Project LIGHT:

The theoretical underpinning for the learning was the step wise progression through the Kolb learning cycles in which experiences are followed by reflection and critical analysis towards new ways of knowing and new possibilities (Kolb 1984). The teaching design includes instruction, group work, experiential learning with reflection. The setup was mindful throughout of listening to local community workers who had experience of working with homeless people. Student protection was offered by local police trainers and life support by the local Red Cross charity.

Classroom Small group learning

- Understanding about homelessness, legal considerations and policy
- Health and social care needs of homeless people
- Minor health recognition and common health problems e.g. skin conditions, diabetes
- Drug and alcohol use
- Mental health
- Motivational counselling
- Ethical principles and safe guarding
- Health promotion
- First aid and life support
- Managing challenging behaviour and self-protection

Placements with local statutory and voluntary providers for homeless people, include prison visits, voluntary sector homes, police services, police and mental health services, statutory clinics, food banks and similar placements to bring students into contact with homeless people.

Summative Assessment: i) Reflective written outline of experiential learning and the challenges for health promotion to homeless people (1,500 words); ii) A reflective Log Book on new knowledge, skills and attitudes and behaviours from interaction on their placements; iii) 4 OSCE stations with simulator actors portraying homeless people with different health, social and mental health needs.

Methodology

The study investigated the following research question: Does participation in LIGHT advance students' perceived readiness for practice?

The study used sequential mixed methods and had three phases (Lingard et al., 2008). The three cycles were sequential and overlapping. In phase one, students' experiences were obtained using a pre- and post-course evaluation questionnaire, with free text comments. In phase two, we progressed to analysing the student written outcomes and in phase three, the students who graduated from the programme and volunteered were invited for interview. Interviews were semi-structured

using a topic guide, developed from observation of health promotion sessions, consultations with our voluntary sector partners and a literature review.

Sample

The purposeful sample comprised all (medical and non-medical) students who took part in the SSC between 2013 and 2017. In phase one, all participating students were invited to complete the questionnaire; in phase two medical students submitted reflective assignments and in phase three, the medical students who subsequently volunteered on at least one occasion, were invited for interview.

Data Collection

In phase one, the questionnaire was completed at the start of the first session (pre-course) and at the end of the final session (post-course) to test knowledge gained. The evaluation questionnaire was constructed from the student learning outcomes; it consisted of pre- and post-course questions scored using a 5-point rating scale (1 disagree to 5 strongly agree), and additional free text comments on the value of the course. In phase two, the reflective accounts were photocopied for analysis. In phase three, students who volunteered were invited to interview in side-rooms in the university at a convenient time. Interviews lasted for approximately 40 minutes.

All students were verbally informed of the overall research involving questionnaires and coursework to provide consent. Those students who were interviewed gave written consent following receipt of a Participant Information Sheet including consent for their conversation to be tape-recorded. Interviews took place during the academic year 2016-17.

Analysis

Phase one data, scored questionnaires, were entered into SPSS (version 15) and analysed using a non-parametric test; free text comments were analysed using thematic analysis (Braun & Clarke, 2019a).

Phase two data, reflective assignments, were uploaded into NVivo (12) and analysed by three researchers (ES, DK & SM) using content analysis with a competence framework on student knowledge, skills and attitudes (Joffe & Yardley, 2004).

Finally, phase three interview data from the tape recordings were transcribed verbatim into Microsoft Word (by LB) and analysed using thematic analysis (Braun & Clarke, 2019a). This involved familiarisation, initial coding, sorting of codes into main themes and sub-themes, and reviewing and refining (LB, ES & SM). Data were continuously analysed and interviews stopped when it was felt that saturation was reached (Braun and Clarke, 2019b). This qualitative approach looked for ‘sense making’ and discovery of the added value of service learning by student volunteers (Denzin & Lincoln, 2000). The researchers adopted a reflexive stance and were mindful of qualitative research rigour adhering to the eight steps as outlined by Tracy in 2010.

Results

Between 2014 and 2017, 194 students completed the SSC (145 Medical and 49 other students), and of these 194 students we successfully gathered 171 (87%) questionnaires for analysis. In phase two, 145 medical students’ reflective essays were collected and photocopied. In phase three, 20 medical students who regularly volunteered came for interview.

The *quantitative* evaluation from the pre-post questionnaires on student learning about all aspects of homelessness, including medical and physical health and life stresses resulting in challenging behaviour, were significant ($P < 0.001$) (Table 3).

Table 3:

Self-Perceived Scored pre and post learning Outcomes (all students)

Question	Mean & Mode	Mean & Mode	Significance

	pre score	post score	
I understand about homelessness and the statutory and non-statutory organisational responses	$\bar{x} = 1.7$ $Mo = 1$	$\bar{x} = 4.0$ $Mo = 4$	Z=-9.603 P<0.001
I understand about minor illness and injury relevant to the homeless sector	$\bar{x} = 2.4$ $Mo = 2$	$\bar{x} = 4.3$ $Mo = 4$	Z=-9.504 P<0.001
I could describe the presentation and management of chronic health conditions within the homeless sector	$\bar{x} = 1.9$ $Mo = 2$	$\bar{x} = 4.0$ $Mo = 4$	Z=-9.139 P<0.001
I could describe common mental health problem experienced by homeless people	$\bar{x} = 2.5$ $Mo = 2$	$\bar{x} = 4.4$ $Mo = 4$	Z=-9.325 P<0.001
I understand and appreciate the drug and alcohol problems within the homeless population	$\bar{x} = 2.8$ $Mo = 3$	$\bar{x} = 4.4$ $Mo = 4$	Z=-8.874 P<0.001
I could describe common approaches to manage substance abuse	$\bar{x} = 2.3$ $Mo = 2$	$\bar{x} = 3.4$ $Mo = 4$	Z=-8.961 P<0.001
I could describe abilities and competence in basic life support	$\bar{x} = 3.2$ $Mo = 3$	$\bar{x} = 4.5$ $Mo = 5$	Z=-8.302 P<0.001
I have developed an awareness and appropriate response skills for working in difficult and challenging situations	$\bar{x} = 2.3$ $Mo = 2$	$\bar{x} = 4.0$ $Mo = 4$	Z=-9.163 P<0.001
I could explain relevant ethical and legal principles for working within LIGHT and working with homeless people	$\bar{x} = 1.6$ $Mo = 1$	$\bar{x} = 3.7$ $Mo = 4$	Z=-9.670 P<0.001
I could evaluate effective health promotion interventions for homeless people	$\bar{x} = 1.7$ $Mo = 2.0$	$\bar{x} = 3.9$ $Mo = 4$	Z=-9.496 P<0.001
I could evaluate my limitations including personal anxieties of clinical uncertainty for working with challenging populations	$\bar{x} = 2.5$ $Mo = 3$	$\bar{x} = 4.2$ $Mo = 4$	Z=-9.110 P<0.001

Table 4:

Log Book Content Mapping

THEMES and subthemes	Student representative extracts
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<p>KNOWLEDGE</p> <ul style="list-style-type: none"> ○ Understanding about homelessness and the range of statutory and voluntary providers ○ Understandings of physical and mental health problems in homeless people ○ Understanding about the importance of health promotion ○ Ethical and legal situations ○ Understanding about interprofessional working- teamwork 	<p>“I have acquired a broad knowledge around homelessness which most other doctors do not receive.... This will be transferable to many vulnerable groups...” Junior Medical Student, 3rd year, December 2014</p> <p>“I have gained a good appreciation of the services available to homeless people, best health care or social care. Also some of the challenges faced by homeless people to their health, mental health... I have a much better understanding of this group of people... or would have if I had not undertaken this project” Junior Medical Student, 3rd year, 2016</p> <p>“Common healthcare issues surrounding the homeless like drug and alcohol and smoking cessation and why people find themselves homeless”, Junior Medical Student, SSC, 2016</p> <p>“Really learnt a lot about mental health an area not really covered by the medical school” Junior Medical Student, 3rd year, December 2014</p> <p>“It has been a great way to incorporate how medics must work within the law” Senior Medical Student, 5th year, August 2014</p> <p>“I have learnt how fundamental interprofessionalism is to ensure the best provision of care is provided to homeless people.’ Medical Student, 3rd year, December 2014</p>
<p>SKILLS</p> <ul style="list-style-type: none"> ○ Talking to homeless people they would not normally meet sometimes in unique placements e.g. prisons ○ Delivering health promotion activities and developing teaching skills ○ How to coordinate a team ○ Advanced communication skills such as picking up on non-verbal clues ○ Managing challenging behaviour and keeping safe ○ Gaining confidence ○ Compassion ○ Managing challenging situations 	<p>“The SSC placed me in situations I never expected. These situations and the stories you hear have really prepared me...” Medical Student, 3rd year, SSC, December 2014.</p> <p>“I improved my presentation skills in the sense that I am used to making interactive presentations with demonstrations...” Junior Medical Student, SSC, December 2013</p> <p>“The ability to coordinate a sub-team to deliver a health promotion event” Junior Medical Student, SSC, December 2013</p> <p>“Communication and team working with other professions both healthcare and others” Medical Student, 3rd year, 2016</p> <p>“I gained a lot of confidence from the experience as it was amazing to see things from a different perspective” Medical Student, 3rd year, 2016</p> <p>“Ability to interest with people from a wide range of background and confidence speaking to new people” Medical Student, 3rd year, 2016</p> <p>“Introduction on how to best deal with a difficult and angry patient” Medical Student, 3rd year, 2015</p> <p>“Developed compassion further... the downward spiral need help and support” Medical Student, 3rd year, 2016</p> <p>“Poverty is not a choice ill health is not a choice and we are duty bound to help those who have been affected by ill health and poverty” Student, 3rd year, 2015</p>
<p>ATTITUDES/intended Behaviours</p>	

<ul style="list-style-type: none"> ○ Challenging existing stereotypes and being non-judgemental ○ Compassion and caring ○ Attitude change to interprofessional working ○ Aspirations to run clinics similar to N. America. ○ Value towards the services that support homeless people 	<p>“Actually, speaking with homeless people...this was a pivotal part of my development of attitudes towards homeless people” Senior Medical Student, 5th year, SSC, 2013</p> <p>“I thought the reason people were homeless was because people were lazy and now realise there are various reasons beyond their control...I thought people in prison would be aggressive... but I found most seemed friendly and rather diligent... I used to think homeless people were unmotivated and are content living off benefits, but I found many want to get a job and go into training.” Medical Student, 5th year, SSC, September 2013</p> <p>“Attitudes about the importance of effective interprofessional working have developed as I have seen the times when it hasn’t worked well” Medical Student, 5th year, September 2014</p> <p>“The best part for e was talking to the rough sleepers at the breakfast club as they were very open and honest and because there was no agenda, they could explain their situation on their own terms” Medical Student, 3rd year, 2016</p> <p>“Admiration for the individuals and services which preserve an open an warm manner to engage with this population” Medical Student, 3rd year, 2016</p> <p>“I feel like I better understand the frame of mind of someone in a disadvantaged or homeless position. This will help me to be more empathetic and able to help...” Medical Student, 3rd year, 2015</p> <p>“Increased empathy towards those with substance misuse problems, having spoken to some people in those situations”, Medical Student, 3rd year, 2015</p> <p>“Greater compassion for people who are often very vulnerable adults ” Medical Student, 3rd year, 2015</p>
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The free text comments confirmed the positive outcomes from the learning model. The phase two content analysis of the students’ reflections identified new knowledge, understanding about the sensitivity of communication and changed attitudes towards homeless people. [Table 4](#) contains extracts from the student log books on their new knowledge about homelessness, skills for working with and understanding how to manage homeless people and attitudes which show empathy and greater understanding and which challenged their prior stereotypical views. Students formed professional compassionate attitudes and a value for interprofessional working and health promotion to support this population:

Throughout my experience of Project LIGHT though, I have realised that I was under many misconceptions, and that homelessness is far more complex than I previously thought. I also learnt that the available services for this vulnerable group... were numerous, accessible and beneficial if they engaged effectively. (Junior SSC, 2016)

I found this course to be particularly helpful because over summer I worked as a ward clerk on a trauma ward connected to the A/E department a lot of homeless people came in and it was shocking to see how little they knew about how to manage their discharge. (Senior SSC, 2015)

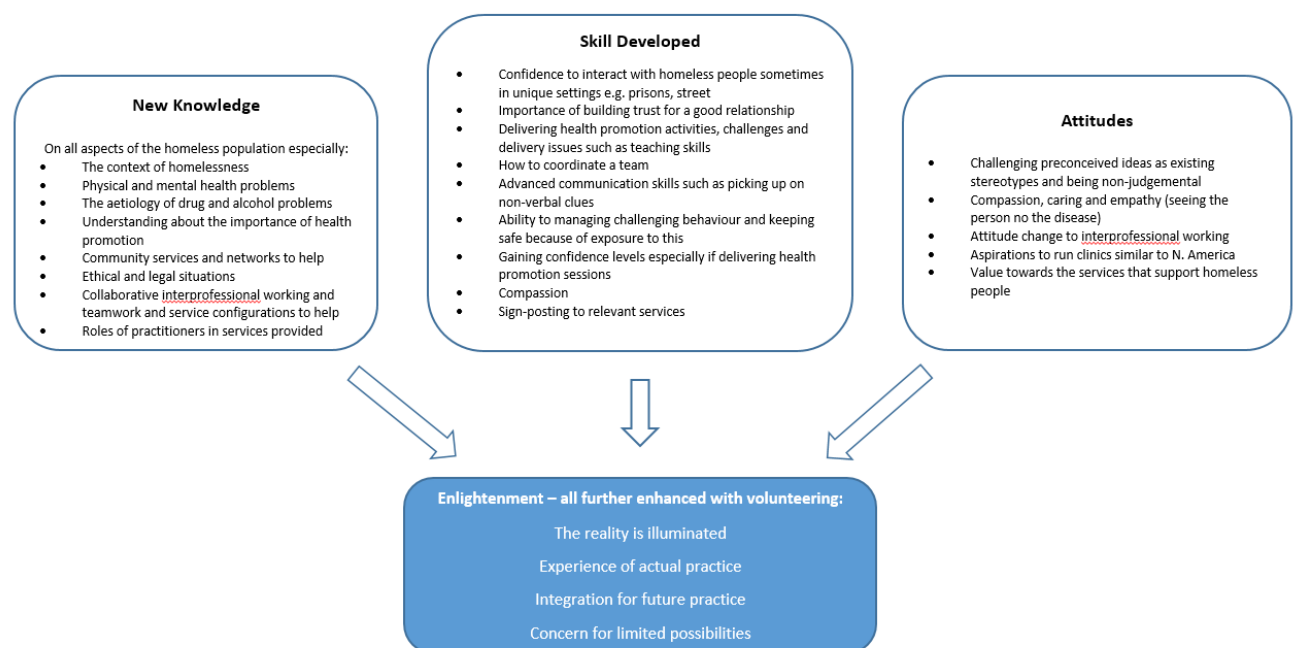
The prison placements which offered contact with this group were also highly valued, as noted by a 3rd year SSC in 2015, “I thought the prison placement was very effective in teaching me how to work with challenging people.”

The interviews highlighted main themes with subthemes; these are presented with illustrative quotes. Interview data from the students who volunteered contained particularly powerful insights. The students who volunteered had faced more personal challenges; these participants demonstrated deeper and more illuminated understandings and revealed a greater sense of being prepared for practice (Figure 1). Through engaging with homeless people, students gained enlightenment, as their new knowledge was seen and experienced through their interactions with homeless people. In this way their health promotional conversations advanced their communication skills and changed their attitudes towards homeless people and they could see how to engage with homeless people in their future careers.

The main themes identified were; i) student stereotypical perceptions about homeless people which caused them fear and anxiety; ii) the power of contact with homeless people to break down stereotypes; iii) a greater understanding of the injustices faced by homeless people when accessing healthcare; iv) greater confidence to manage homeless people; v) the power of the experience to prepare them for their future practice; and vi) the imperative for this learning to be available for all medical students.

Figure 1:

Content Analysis of student learning in Project LIGHT



Medical students’ *negative stereotypes* of homeless people were highly prevalent and revealed a lack of insight into the complexity of the issue.

‘Where I live...from my flat window...you always see homeless people come and they hang out and sort of drink and smoke and basically shout at each other... I think everybody has a stereotype of homeless person, even if they don’t admit it.’ (Gabriella¹)

This led to apprehensiveness of the unknown, expressed as *fear and anxiety* by students who volunteered to lead a health promotion session for the first time. These students did not know what to expect and feared the homeless people might be aggressive or at the very least disruptive. Alexa shared “I felt quite nervous, cause I hadn’t really done anything like this before...there had been some incidents of fighting with other inhabitants and things like that,” which was echoed by Elouise, “I was really nervous...I thought that maybe some of them might be struggling with mental health issues and that might play out in their behaviour and drug and alcohol abuse as well.”

The contact with homeless people led to *changes* to these previously negative attitudes. This led to sub-themes of a deeper understanding and empathy and concern for their access to health care:

It’s a very misunderstood population. There are a lot of preconceptions about someone who’s living in a homeless shelter, but actually when you work with them, you realise some of these preconceptions are not true at all... my view changed. (Alexa)

There are so many reasons why someone might become homeless, whether they’ve been kicked out of their home by their family, mental health problems, a cycle of drug abuse...I’d probably only thought about rough sleepers...learning about people like sofa surfers, really opens your eyes... (Charlie)

Students who spent more time volunteering reflected on homeless people’s *access barriers to healthcare*. Much of the reluctance to access services came from prior negative experiences; often healthcare staff being unwilling to help. They also identified a plethora of other factors including pride, the problems associated with having no address, “...It makes everything ten times more difficult you can’t go to a GP unless you have an address to put down, and that the whole issues...” (Danielle), and that health, within the midst of complex stressful lives, is a low priority. Bryony described an interaction with a homeless person: “... he was talking about when he’d seen doctors in the past and the way he spoke about it you could tell it had been a bit confrontational. To see it from his point of view was really beneficial.” Harriet agreed, sharing “A lot of the homeless people have got a lot of negative things to say about doctors and medics, they tell you they go to A&E and they’re ignored or they’re chucked out...all that happens!”

As a consequence of this more prolonged contact students felt *better prepared for practice*. All students had learnt a great deal about services available and felt armed with knowledge they could now use when qualified. Charlie shared their thoughts on the awareness gained through volunteering: “Before Project LIGHT I’d always assumed there must be places that homeless people can go to get some help, but now I actually know that there’s many places in the community provided by many different organisations.” This resonated with Gabriella:

¹ Pseudonyms used for student volunteers

I think it's just prepared me for the practicalities of being a doctor, so for example, if I am working in A&E and a homeless person came in, I'd be OK... more confident about my approach to dealing with a homeless person in terms of the practicalities. (Gabriella)

Managing complexity as homeless people had health and social care needs, highlighted the importance of a full holistic assessment: "... a lot of us can cure an illness... It takes a better doctor to be able to look and try and prevent this from happening again, to offer suggestions or services that are available..." (Louise). Students were aware that solving all the presenting problems would be challenging, and almost impossible, but interventions were needed to prevent the same issues arising time after time:

I think I'd be more aware ...that it's likely to be one health issue amid a lot of other issues, instead of just seeing it as a medical issue for example. Like there's a lot more that needs to be dealt with, you can't just deal with the one health issue. (Imogen)

All students understood that this preparation for practice was about developing skills to *communicate with homeless people* and the confidence to make them more at ease treating them fairly and without prejudice. This was particularly striking in those who volunteered. All perceived the need to build relationships, as noted by Fiona, "...I'd approach questions differently, so if I know they're homeless I wouldn't go, 'so who do you live with at home'..." and Harriet:

It's really good to learn how to interact appropriately with these kinds of people. Because you know, it's not easy, most medical students come from privileged backgrounds and will never have interacted with anyone with these kinds of problems, drugs, alcohol and all that stuff... (Harriet)

One of the main areas was a greater confidence to speak up and advocate for the homeless person, which can be daunting for first year newly-qualified doctors:

Also it meant that when it came to planning the discharge, it gave me the confidence to speak up on the ward round to say, '*this person is homeless, maybe we need to think about how we're going to discharge them safely and what other things they need*'. That can be quite hard actually but this gives you the confidence. (Fiona)

There was an overwhelming agreement that this experience would be *beneficial to all medical students*; students recognised that the experience was in stark contrast to other placements in their curriculum. Many went further stating it should become compulsory for all students, although there was a reflection by others that that might make some students reluctant to engage:

I don't think that it should even be debated that classroom teaching is sufficient as a means of preparation for treating homeless populations..... At the end of the day this [LIGHT] should....provide some kind of service to the community... (James)

If you put it across as just another hoop to jump through, just another thing to get signed off, people don't engage, you're not going to get anything out of it and the homeless people there

aren't going to get anything out of it. But it needs to be that you definitely have that exposure, rather than leaving it to chance. (Bryony)

Finally, those who volunteered, like Katrina, highlighted the importance of the preparatory training beforehand:

[The training] gave me a framework to hang my interactions on when I met people, like it gave me that background information. So the talks told us about the services and then I got to see the services in action and I got to see the people using those services. It might have been a bit confusing if I hadn't had the training. (Katrina)

There was also strong agreement that this work was not just for medical students. There was enthusiasm for learning with and from other healthcare students because so much of the provision to support homeless people is interagency and interprofessional.

Discussion

The development of this service learning, has been an iterative process over ten years using a student-staff-community partnership approach (Goodier et al., 2015). To our knowledge, this is the first sustained UK model of community engagement with this marginalised population. Our research has identified proto-professionalism in action with students gaining transferable qualities and skills, maturity, self-confidence, ethical values and team working, similar to the reported outcomes from North American service-learning studies (Dungani & McGuire, 2011). Some LIGHT students have progressed to further achievements including publications and conference presentations. The learning is now embedded in the medical curriculum and a growing number of medical students participate. In addition, we offer a bi-annual interprofessional course outside the curriculum. LIGHT has also become a charity sitting outside of the university processes; the charity supports the volunteers and provides a forum for dialogue and oversight from all stakeholders in the partnership. A part-time coordinator post for the project has been set up by the medical school to liaise between the university, community partners and volunteers. This coordinator supports the scheduling and monitoring of outreach volunteering, ensures record-keeping and assists with recruiting students to the curricular and extra-curricular training.

Data from the participants confirmed their progression along the pathway for professional development as outlined by Hilton and Slothick (2005). The study identified that students gained 'practical wisdom' through immersion in the realities of practice with disadvantaged and hard to reach people. Placement learning was important because of the face-to-face contact with homeless people but those that volunteered appeared to advance to an even deeper appreciation of social injustice. Students learnt from role models working alongside professionals and experienced volunteers with homeless people and when managing challenging and complex situations. This is a key ingredient in the attainment of professionalism (Boyer, 1990).

Students' attitudes were challenged and changed. We can postulate that this was through the psychological mechanism known as 'cognitive dissonance', as previous negative attitudes were challenged through contact with homeless people (Festinger, 1957). The data revealed new knowledge such as understandings about the legal issues relating to and governing what happens to homeless people, and awareness of the interprofessional and interagency nature of service provision. There were additional valuable aspects of the learning rarely found in their training, for example, managing conflict with vulnerable patients and managing complexity. Feedback on the OSCE examination, including a station in which an actor simulated challenging behaviour, rated the experience highly. Students consolidated their knowledge in practice especially in developing and advancing their communication skills. Students who volunteered felt more exposed as they were responsible for rapport building with vulnerable, often male, adults.

All developed more compassionate attitudes recognising the vulnerability of homeless people and the stark contrast to their own home lives and personal experiences (Gordon, 2019). This aligns with findings from nurse service learning opportunities (Jarrell et al., 2014). Students understood the importance of health promotion and they continue to devise innovative solutions for engaging this population, for example, by using social media. We recognised the ethical requirements for this project. Although healthcare students who volunteer have a privileged status, our partnership approach, structured within a sustainable project, ensured homeless people had confirmed their willingness to learn from students; students were not perceived to represent statutory authority (Nakamura et al., 2014; Goodier et al., 2015).

Confronting students with society's issues should not be done without care for their psychological well-being. The staff-student-community partnership has throughout ensured that students' concerns were addressed. Our volunteer preparation was shaped iteratively, responding to student concerns, for instance, with the Police now leading teaching on personal safety. The medical school also works closely with statutory and voluntary service partners. In our view, our findings demonstrate students' social responsibility and ability to challenge stereotypes (Larkins et al., 2013). These students have voiced a deeper understanding of social inequalities and equity for health and as such, perceive themselves as better prepared for practice (Boelen et al., 2016).

This work is in line with the vision of the Lancet Commission (Frenk et al., 2010) and reflects the expectation of universities for more community outreach (QS Stars, 2021) with a recent push within medicine (Global Consensus for Social Accountability of Medical Schools, 2010; Meili et al., 2011). As pressures on traditional placements continue, service learning placements within the voluntary sector provide valuable additional learning. These placements prepare students to challenge service design and to work in partnership with a range of service providers (Frenk et al., 2010) and with the communities they serve. Our outreach work has led to curriculum innovation and learning that prepares students for complex interprofessional working. The challenge is to extend this work from sub-sets of the curriculum to whole cohorts.

There are limitations to this study. The students used self-perceived rating scales which are open to misinterpretation and false scoring. The reflective essays may not fully reveal student true attitudes and could have been aspirational. However, the one-to-one interviews sought to affirm the value of the learning and their volunteering experiences and were more illuminating, although we recognise these were a self-selected student group of keen volunteers. Through administrative error we failed to photo-copy all the log books, although the number were highly representative. Because the course attracts students with a willingness to learn about homelessness, our students may not represent the views of the entire cohort. We recognise that only as graduates progress into practice will the full benefits of this learning be apparent. We have evidence of some students, prior to qualification, becoming advocates for the homeless, because of this project.

Conclusion

As faculty members, we remain convinced of the power of student-staff-community partnerships if we are all to move towards more ethical outreach service models within health and social care education. Since 2010, we have seen the project continue to thrive and expand. The interprofessional extra-curricular courses continue to attract students from Pharmacy, Nursing, Health Psychology, Operating Department Practitioners, Physiotherapy, Medical Scientists and Law, as well as medicine.

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Ethical approval

The study received University ethical permission (Code 7851- esa1).

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